

REMARKS

Claims 1, 8-10, 17, 21, 22, 30, 32, 38 have been amended to more clearly define Applicants' invention and to correct certain informalities. No new matter has been added. Upon entry of this Amendment, claims 1-39 will be pending. Reconsideration and allowance of the present application based on the foregoing amendments and the following remarks are respectfully requested.

In the Office Action, claims 1-10, 14-31, and 39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kazerooni (U.S. Patent No. 5,915,673). Applicants respectfully traverse this rejection.

Claim 1 is directed to a multi-function hub for use in an assist system that includes, *inter alia*, a physical interface and a computational node disposed on the physical interface. The computational node includes programmable logic for implementing program controlled functions. The hub also includes an input/output ("I/O") interface disposed on the physical interface that is adapted to communicate with the computational node and a plurality of other computational nodes. The I/O interface communicates with the plurality of other computational nodes via a common data link.

In contrast, Kazerooni teaches an end-effector 222 that sends signals to a separate controller 221 via a signal cable 223. (Kazerooni at col. 14, lns. 49-53; FIGs. 11-16.) Kazerooni does not disclose or suggest a multi-function hub that includes, *inter alia*, a computational node disposed on the physical interface that includes programmable logic for implementing program controlled functions, and an I/O interface disposed on the physical interface that is adapted to communicate with the computational node and to communicate with a plurality of other computational node via a common data link, as recited by claim 1. Accordingly, Applicants respectfully submit that claim 1, and the claims that depend therefrom, are patentable over Kazerooni and respectfully request that the rejection be withdrawn.

In the Office Action, claims 11-13 and 32-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kazerooni in view of Yuan et al. (U.S. Patent No. 4,942,538). Applicants respectfully traverse this rejection.

Claims 11-13 and 32-38 depend from claim 1. As discussed above, claim 1 and the claims that depend from claim 1, are patentable over Kazerooni. Yuan et al. does not make up for the deficiencies of Kazerooni. Yuan et al. merely discloses a telerobotic system that includes a robot manipulator 10 and a separate computer 12. (Yuan et al. at col. 4, lns. 9-59;

FIG. 4.) Yuan et al. does not disclose or suggest a multi-function hub for use in an assist system that includes, *inter alia*, a computational node disposed on the physical interface that includes programmable logic for implementing program controlled functions, and an I/O interface disposed on the physical interface that is adapted to communicate with the computational node and to communicate with a plurality of other computational node via a common data link, as recited by claim 1. Accordingly, Applicants respectfully submit that claims 11-13 and 32-38 are patentable over Kazerooni in view of Yuan et al. and respectfully request that the rejection be withdrawn.

In the Office Action, claims 1-31 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 09/781,801. Applicants respectfully submit that, as discussed above, the claims pending in the present application are directed to a multi-function hub for use in an assist system, whereas the claims of copending application number 09/781,801 are directed to an intelligent trolley module for use in an assist system, an intelligent lift module for use in an assist device, and an input device for use in an assist system. However, should both applications proceed to issuance such that it becomes necessary to file a terminal disclaimer, Applicants currently intend to file a terminal disclaimer at that time to overcome this rejection.

All rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains at issue which the Examiner feels may best be resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,  
PILLSBURY WINTHROP LLP



EMILY T. BELL  
Reg. No. 47,418  
Tel. No. (703) 905-2261  
Fax No. (703) 905-2500

Date: September 22, 2003  
P.O. Box 10500  
McLean, VA 22102  
(703) 905-2000